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AMENDMENTS TO THE SPECIFICATION

Starting on P. 7 Line 3 (DT)

Please amend paragraph [0027] of the published application as follows:

[0027] In the embodiment pictured, compressed oxygen is provided from a tank 80 into the circuit via a compressed gas conduit [[82]] 86, and a breathable combination of oxygen and inert gases known as a diluent is provided to the system via a compressed gas conduit [[81]] 87. For the pictured embodiment, a primary computer 85 is worn on the diver's left wrist and a secondary computer 84 is worn on the right wrist. The computers are connected to the control device in the end cap of the scrubber canister by cables. Located near the diver's left hip is a pressure gauge for the diluent container 81 and a switch for manual addition of diluent into the circuit. Located near the diver's right hip is a pressure gauge for the oxygen container 80 and a switch for manual addition of oxygen into the system.

Starting on P. 10 Line 13 (DT)

Please amend paragraph [0037] of the published application as follows:

[0037] As noted above, the end caps of the rebreather apparatus disclosed herein are made so that the sensing and control systems can be secured inside the end caps. FIG. 7 and FIG. 8 are two examples of possible end cap configurations. The end cap 41 in FIG. 7 includes springs [[60 & 61]] 61 that are used to assist in securing the insert lid in place, and gas connection 62. The connection 62 could be used for manual addition of oxygen if the rebreather apparatus were set up to be a fully closed circuit. The cap is connected to the supply circuit via a gas-carrying conduit 67 that is attached to the gas tube on the end cap.

Starting on P. 10 Line 20 (DT)

Please amend paragraph [0038] of the published application as follows:

[0038] The end cap 75 in FIG. 8 includes sensors and control devices 70 & 71 for a control system and there is a gas connection 72 and gas connection 73. The gas connections could be

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used for automatic addition of oxygen and/or diluent to the system. The cap is connected to the supply circuit via a gas-carrying conduit 77 that is attached to the gas tube on the end cap. The removable end caps can be easily replaced to reconfigure the rebreather apparatus and the use of removable end caps allows the caps to be changed from either end of the canister. Additionally, two independent and/or redundant gas addition and monitoring systems can be placed in the canister, one at each end. Examples of systems that can be used are any combination of manual addition, semi closed, fully closed, secondary, passive addition, or demand.

Starting on P. 11 Line 6 (DT)

Please amend paragraph [0039] of the published application as follows:

[0039] FIG. 9 shows the rebreather apparatus disclosed herein as it is configured to be worn differently than worn by the diver in FIGS. 1 & 2. The canister 90 is secured to a harness such that a diver can wear the canister on the front of the divers body. The counterlungs 92 and 98 are attached to shoulder straps. In the embodiment depicted the apparatus has only one container of compressed gas 91, but other embodiments can include an additional container of compressed gas. FIG. 10 shows yet another embodiment of the rebreather apparatus, including an inhalation portion having two gas-carrying conduits 111, 113 and a counterlung 112. An exhalation portion also has two gas-carrying conduits 115, 117, and a counter lung 116. The canister 100 may be secured to the back of the divers body, with two containers of compressed gas 101 and 102 on either side of the canister 100.

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